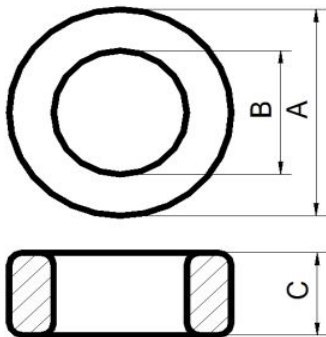


Ferrite Core Specification

Technology Dept.

NCD P/N	HP3 H78/50.5/25	Customer		Spec No.			
Cus. part		Customer's P/N		Rev.No.	00	Page	1/1
				Dimensions (mm)			
				A	78.0±1.0		
				B	50.5±1.0		
				C	25.0±0.6		
Parameter	I _e =195.6mm		A _e = 338.1mm ²	V _e =66079mm ³	m≈341 g/pcs		
Electric Charateristics	Item	Unit	Spec.	Test Condition		Instrument	
	A _L	nH/N ²	15200±30%	10kHz,0.1V,10Ts,23±2℃		HP4284A or eq.	
Appearance	Item		Content				
	Clean		Appearance must be clean.No powder accretes and watermark				
	Burr		Any blighting burr was not allow existed.				
	Crack		No crack and scar affect using				
	Chips		dia.≤4.0mm ² ,2part max.				
	Pull-out		Pull-out area≤ 1/10				
	Crystal Grain		Dia.3.0mm max ,less than 5 parts;Dia.5.0mm max ,less than 4 parts				
Marking	(No Marking)						
Packing		Material	Quantity	Unit	Marks		Label
	Inner	H80 Styrofoam	12	Pcs			
	Outer	N425*300*220	60	Pcs			
Test Rule	According to GB2828. Once natural project for sampling.(II)Dimensions:AQL=1.0Capability:AQL=0.65						
Customer Affirm	Customer Affirm				Design	Check	Appr.
					Date	2023-12-14	



MAANSHAN NEW CONDA MAGNETIC INDUSTRIAL CO.,LTD.



材料特性 MATERIAL CHARACTERISTICS

● HP3型高磁导率铁氧体材料 High permeability ferrite material HP3

特性 Characteristics	符号 Symbol	单位 Unit	条件 Condition	HP3
起始磁导率 Initial permeability	μ_i		25℃	10000±30%
相对损耗因数 Relative loss factor	$\tan\delta/\mu_i$		10kHz	$<7\times10^{-6}$
饱和磁通密度* Saturation flux density*	Bs	mT	1194A/m	400
剩磁* Remanence*	Br	mT		90
矫顽力* Coercivity*	Hc	A/m		5
相对温度系数 Relative temp. coefficient	$\alpha_{\mu r}$	1/K	25~70℃	$(-0.5\sim1.5)\times10^{-6}$
材料磁滞常数 Hysteresis material constant	η_B	1/mT	1.5~3mT	$<1.0\times10^{-6}$
居里温度 Curie temperature	Tc	℃		>130
电阻率* Resistivity*	ρ	$\Omega\cdot m$		0.2
密度* Density*	d	kg/m ³		5.0×10^3

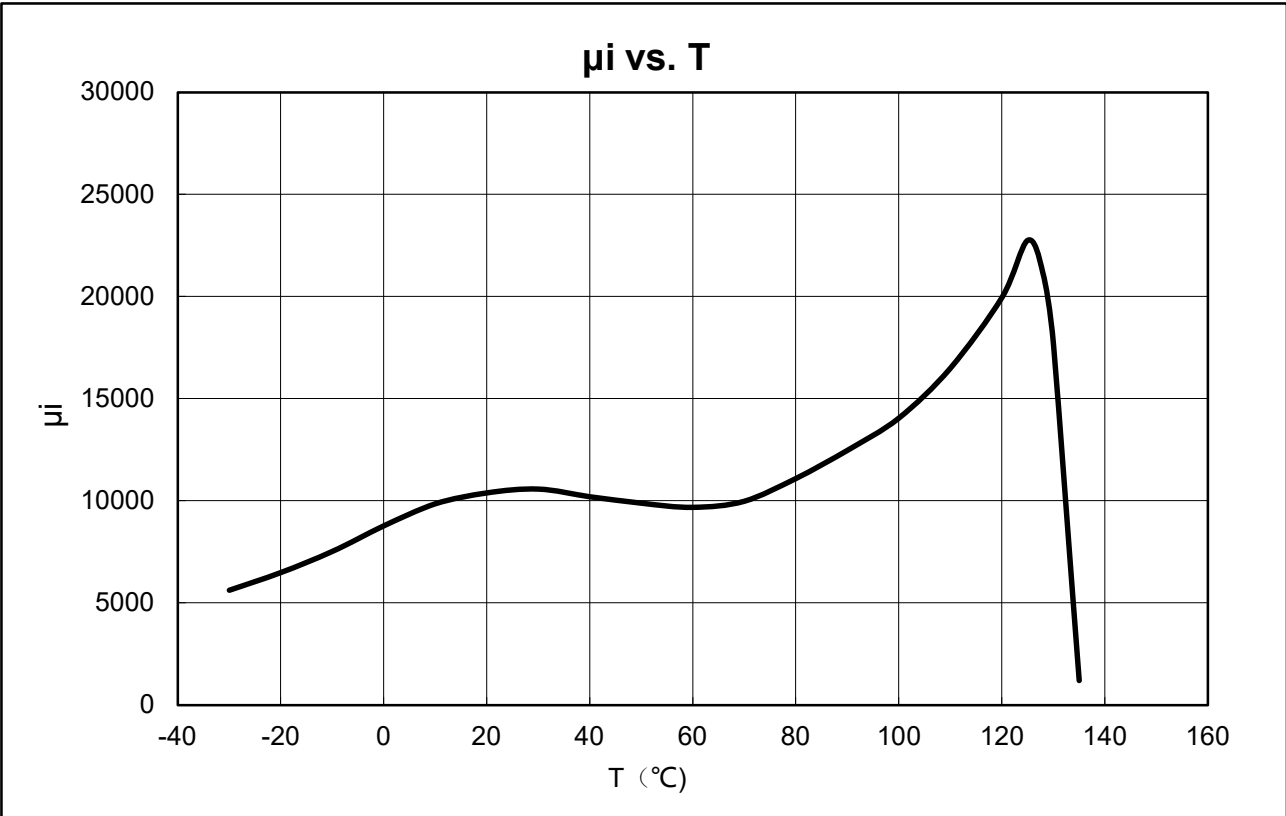
注： 1、如无说明，各项数值均在室温下用 $\Phi 25\times\Phi 15\times 10$ 环型磁心测得。

2、*为典型值。

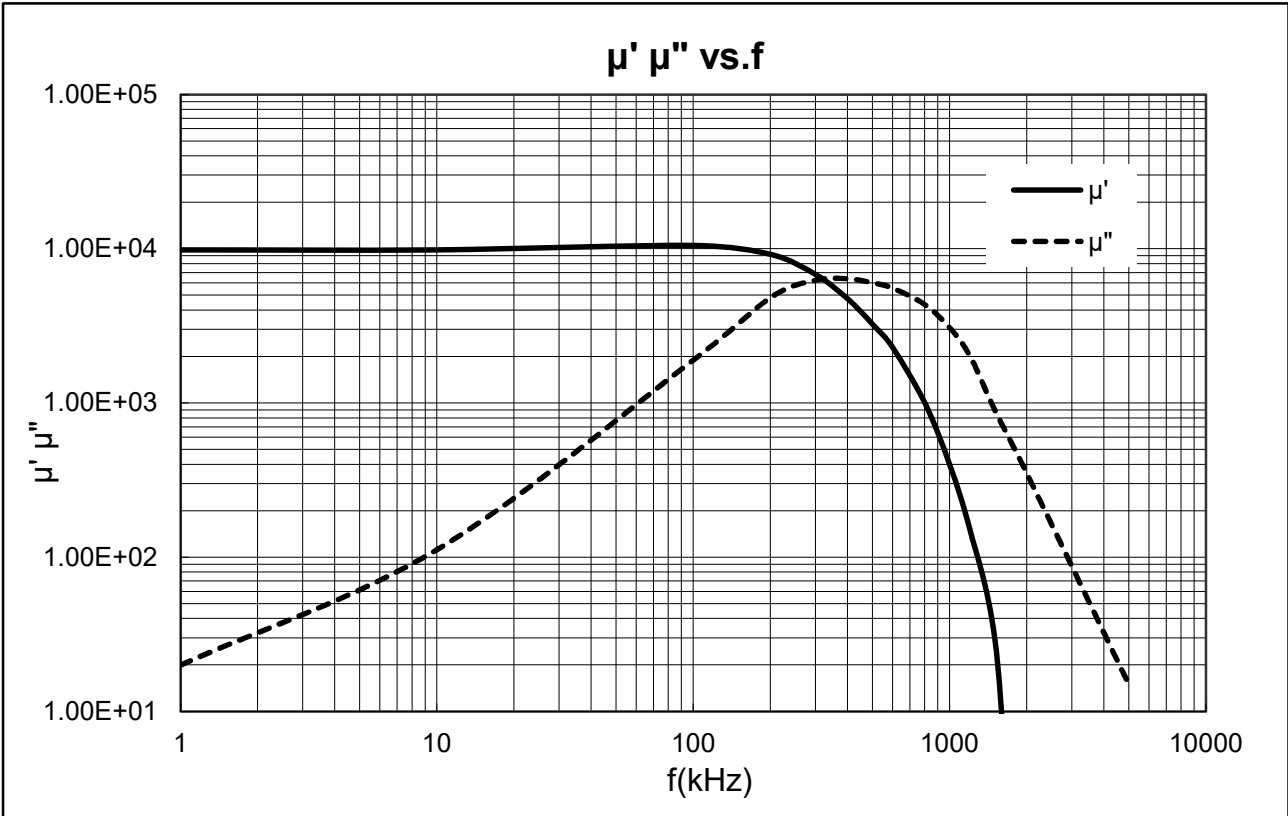
Note: 1.The values were obtained with toroidal core $\Phi 25\times\Phi 15\times 10$ at room temperature unless otherwise specified.

2. * Typical value.

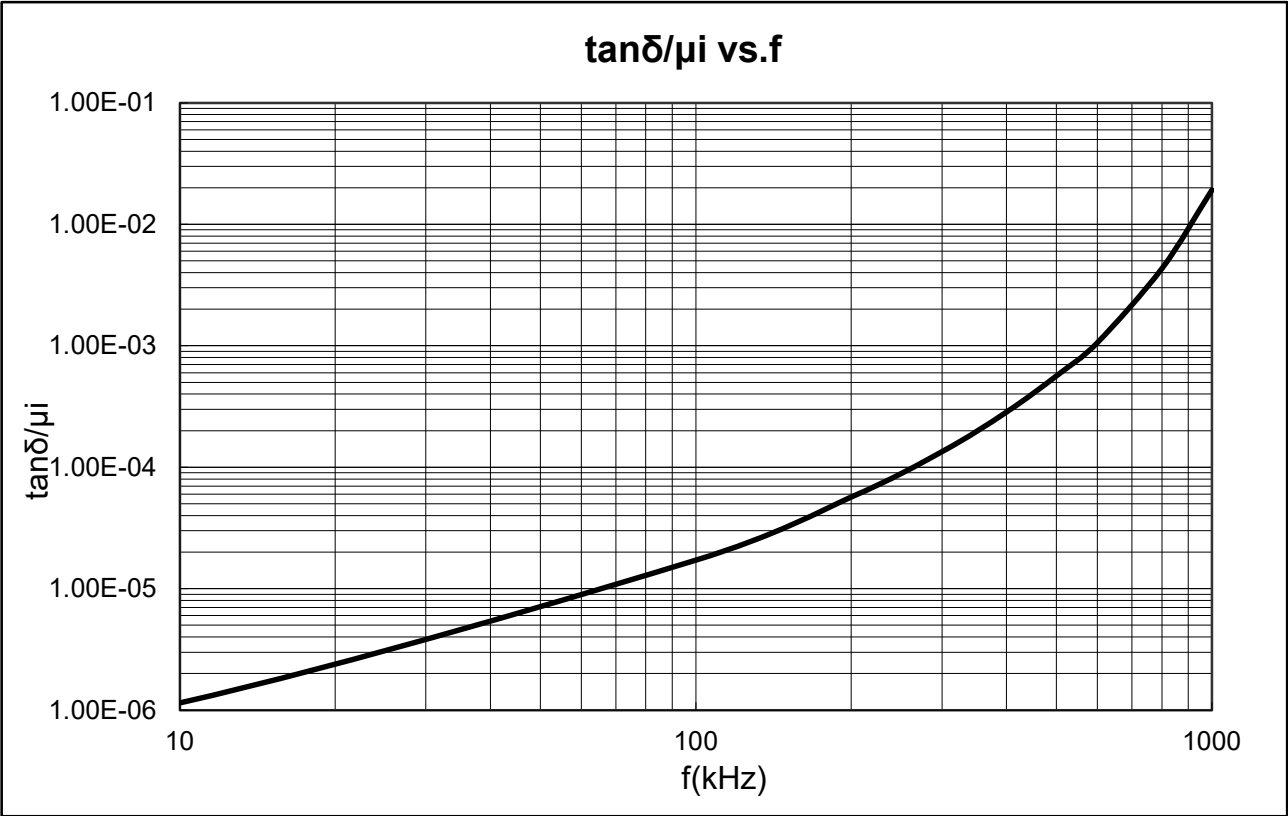
初始磁导率与温度关系
Permeability μ_i vs. Temperature T



复数磁导率与频率关系
Complex Permeability μ' μ'' vs. Frequency F



相对损耗因数于频率关系
Relative loss factor $\tan\delta/\mu$ vs.frequency f



等效阻抗与频率关系
Equivalent impedance $Z \cdot C1/N^2$ vs. Frequency f

